

REMARKS

This is intended as a full and complete response to the Office Action dated May 28, 2004, having a shortened statutory period for response set to expire on August 28, 2004. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, selected paragraphs have been amended to correct minor editorial problems and are identified by the starting page, line number, and ending page, line number. Applicants respectfully request entry of the amended paragraphs.

The drawings filed on July 23, 2001 are objected to by the Examiner. Applicants have amended the drawings to better reflect the specification and clarify the invention. Applicants respectfully request entry of the amendments.

Claims 15-31 remain pending in the application and are shown above. Claims 15-31 are rejected, and claim 32 is objected to and renumbered 31 by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claim 20 has been amended to correct matters of form. Claims 15 and 23 are amended to clarify the invention. These amendments are not presented to distinguish a reference, thus, the claims, as amended, are entitled to a full range of equivalents if not previously amended to distinguish a reference.

Claims 15-31 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,286,451. Applicants have timely filed a terminal disclaimer which obviates the double patenting rejection over a prior patent. Withdrawal of the rejection is respectfully requested.

Claims 15-31 stand rejected under 35 U.S.C. §112, first and second paragraph, as failing to comply with the written description requirement, and failing to particularly point out and distinctly claim the subject matter of the invention, by claiming an "electrically symmetric" processing enclosure. Applicants respectfully traverse the rejection. Applicants submit that the specification is distinct in describing a dome made of a dielectric material that is transmissive to RF energy, preferably a ceramic such as aluminum oxide, aluminum nitride, or quartz. (see page 9, line 26 - page 10, line 2).

Applicants submit that someone skilled in the art could make and use the dome as contemplated by the Applicants. Applicants further submit that "electrically symmetric" is a material attribute to electricity with respect to the formation of a symmetrical plasma within the dome. Withdrawal of the rejection is respectfully requested.

Claims 15-31 stand rejected under 35 U.S.C. §102(e) as being anticipated by *van Os, et al.*, U.S. Patent No. 5,792,272. Applicants respectfully traverse the rejection. *Van Os, et al.* teaches a plasma chamber including an upper portion comprised of two distinct pieces: a cylindrical sidewall, made of a dielectric material and surrounded by RF coils, and a lid having a removable gas injection manifold (see reference numeral 15, figure 3A,), made of aluminum (see column 6, lines 40-43). *Van Os, et al.*, does not teach, show, or suggest a substrate processing enclosure comprising a dome-shaped lid member made of a dielectric material, as recited in claims 15 and 23.

Further, *van Os, et al.* does not teach, show, or suggest an annular interior processing region tapering towards a lower end defining an exhaust passage, and a cantilever mounted substrate at a position above the exhaust passage, as recited in claim 15. The reference teaches a substrate support member (Fig. 6, 20) positioned below the taper, which is not in the lower end of the chamber body, but is above the process chamber (Fig. 6, 16). Withdrawal of the rejection to claim 15, and claims dependent therefrom, is respectfully requested.

In conclusion, Applicants submit that the reference cited by the Examiner, does not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Keith M. Tackett
Registration No. 32,008
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)